



Kaveri Roy
M5(J)



MAKING THE MAGIC PILL

Careers in Pharmacy and Clinical Research are opening new opportunities and avenues for students opting for life sciences and medicine



BY KAVERI ROY

FOR Kala Menon (24), medicines were more than just bitter pills that the doctor prescribes. The intriguing research and trial that went behind the making of the medicines, not surprisingly, encouraged her to do a professional course in Clinical Research over the general courses in Life Sciences.

A Clinical Research Co-ordinator (CRC), at Ruby Hall Clinic, Menon believes, "Clinical Research is at its nascent stage currently and has a very high growth potential. It is a very lucrative alternative for MBBS aspirants considering that the industry is booming." She heads a group of four other CRCs, handles at least 10 projects at a time, multitasking through the different responsibilities from interacting with patients to dealing with the sponsor companies. Clinical Research involves the study of every aspect essential before drug is released in the market. Clinical trials are conducted by professionally trained Clinical Research Associates (CRAs) who scrutinize the administration and progress of a clinical trial (pharmaceuticals, biologics, or devices) on behalf of a sponsor.

The Growth Trajectory

Thanks to the Indian drug market, which is on a growth-track, the need for professional degrees for a career in clinical research has spiralled over the past few years. "The growth in

the Pharmacy industry has surpassed our anticipation. There is a wide gap between the estimated job-demand and the number of trained professionals and the disparity largely, works in favour of the trained professionals," said Dr. Nitin Sewlikar, Principal of Indian Institute of Clinical Research (ICRI).

A report by PricewaterhouseCoopers (PwC) titled "Global Pharma Looks To India: Prospects For Growth" reveals that the Indian industry is likely to become a competitor to global drug makers in certain areas and a potential partner in many others such as clinical trials and drug research. India not only has 20% of the world production of generic or off-patent drugs and vaccines but is also becoming an outsourcing hotbed, thanks to cheaper infrastructure, a large pool of trained professionals and a growing market for the healthcare industry.

Shock resistance

While the boom is for real, the demand for trained professional comes with a requirement for good organisational skills and a high level of energy to sustain the work-load. "Every job in clinical research is multifaceted and while the degree could take you there, how far would you go depends on how well one keeps up across the various facets - administration, business and the research," added Menon. The good news is that "While most industries suffered during the slowdown, we could still place most of our students because the drug industry remained undeterred.

It is not a completely shock resistant industry, there are challenges in the form of infrastructure but for aspiring professionals in clinical research, India is the place to be," according to Sewlikar.

High Aims

Training in clinical research is being sought-after by students from various disciplines of science-stream. Ananya Ghosh, a Bio-Medical graduate, explains her shift to clinical research in her post-graduation degree, "It is a very new career in India, and not many people opt for it.

CAREERS

Also, the challenge to multitask in this profession is very attractive, to me." Though pharmacy graduates have an upper hand, students from other sciences are also looking at this as a potential area, worth considering. One such student Anila Mannathu, a Zoology graduate, shares, "Though Zoology and Clinical Research are very different, as streams, I still opted to specialize in the latter because zoology does not have as promising a future as clinical research." The drug development industry incorporates huge revenues and everybody is wanting to be a part of this growing pie.

Pay-off

With MNCs like Pfizer, Roche, Novartis and Sanofi already established in India and Indian giants like Biocon taking huge strides, there is a myriad of job opportunities that are

fuelling the growth and the opportunities for this sector. "The students can get an average package of anywhere between Rs. 4-6 lacs per annum, added Sewlikar. "Clinical Research is a lucrative career but you cannot expect returns right away. There is very fast growth in the industry but one needs to be patient for growth." says Arun Nair, with Excel Pharmaceuticals.

1. FACT FILE OF CLINICAL RESEARCH CAREERS

The different departments in a Clinical Research organization includes: Clinical operations, Data Management, Pharmacovigilance, Quality control, Regulatory affairs to name a few. In these departments there are broadly the following profiles:

- Clinical Scientists** are the ones who are responsible for the major breakthrough inventions happening in the industry.
- Clinical Researchers** are the people who shoulder the responsibilities of designing and implementation of the research experiments carried on by the scientists. They include designations like - Clinical Research Coordinator, Clinical Research Associate, Project Managers, Biostatisticians, Quality Managers, Clinical Research Manager, Business Development Manager, Clinical Research Investigator and Clinical Data Manager are the people who are directly involved to the actual trial, where all the action is centred.
- Regulatory Department Personnel** are behind arranging documents to be sent to the drugs controller's office for approval. They play the role of an advisory, and provide country-specific regulations for clients outside India.
- Pharmacovigilance department in pharma companies** are involved in Monitoring, researching, assessing and evaluating information from health-care providers and

patients on the adverse effects of medications, biological products etc.

5. Technical Writers are the ones who write and edit standard operating procedures, clinical study protocols, laboratory procedure manuals, and other related documents in the field.

2. INSTITUTES OFFERING THE COURSE

Some of the well-known institutes in Mumbai include:

- Academy for Clinical Excellence
- Asian Institute of Health Sciences
- Bombay College of Pharmacy
- Clinical Research Education and Management Academy
- Indian Institute of Clinical Research

3. SKILL SETS

- Good organizational skills
- Communication skills
- Adaptability and flexibility
- High level of dedication for long hours
- Keen interest in the profession